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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/633,882	08/07/2000	MIKKEL THORUP	106989	3281

7590

05/12/2005

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EXAMINER

BRUCKART, BENJAMIN R

ART UNIT

PAPER NUMBER

2155

DATE MAILED: 05/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action  
Before the Filing of an Appeal Brief**

Application No.

09/633,882

Applicant(s)

THORUP ET AL.

Examiner

Benjamin R. Bruckart

Art Unit

2155

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 29 December 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☒ Newly proposed or amended claim(s) 23 and 27 would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: 1-27.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). \_\_\_\_\_.  
13. ☒ Other: \_\_\_\_\_.

Continuation of 3. NOTE: Specifically claim 21 is amended and the amended would require further search and consideration as the amended changes the scope of the claim and possibly the rejection.

Claim 23 is amended to include limitations from claims 21 and to combine the allowable material into independent form and would be allowable in the amended form.

The 35 U.S.C. 112, second paragraph rejection would be withdrawn from claim 27.

Applicant presents arguments to the remaining claims 1-19, 21, 24-26 that were not argued before.

The examiner has carefully considered applicant's arguments but they are not persuasive.

The claim language is still too broad and the prior art reads openly open the claimed limitations. Applicant does a lot of summarizing and creating of conclusions based on the original reference but does not address the claim language that is mapped. The examiner stresses that applicant is reading the specification into the claim language and that it must be included into the claim limitations.

With regards to claim 1;

Applicant does not reject that the prior art's implied weights are similar to the instant application's cost.

Claim 1 rejection reads,

The Morrison reference teaches a method for controlling traffic flow in a network (Morrison: col. 2, lines 58- col. 3, line 5; col. 5, lines 55-65; col. 7, lines 30-44; Remarks below), comprising:

generating a set of control weights relating to network traffic flow (Morrison: col. 6, lines 42-44; col. 7, lines 30-44; col. 11, line 47- col. 12, line 10) and

controlling traffic flow in the network using the set of control weights. (Morrison: col. 7, lines 30-44)

The Morrison reference does not explicitly state using the best neighbor approach.

Frigioni teaches a best-neighbor approach (Page 6, 1st Paragraph; the Dijkstra algorithm)

Frigioni further teaches that using the dynamic Dijkstra algorithm requires minimum computation by not computing the entire table from scratch at each iteration. (Frigioni, Page 1, 2nd Paragraph)

Therefore it would have been obvious at the time of the invention to one of ordinary skill in the art to create the method of controlling traffic flow in a network as taught by Morrison while employing a dynamic Dijkstra algorithm as taught by Frigioni in order to minimize computation by not computing the entire table from scratch at each iteration (Frigioni, Page 1, 2nd Paragraph).

Morrison does teach controlling traffic based on the control weights related to network flow. Further applicant cites the specification for details distinguishing "steepest decent" from "best neighbor" approach. Applicant is advised that although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Applicant is encouraged to put limitations from the cited specification into the claim language distinguishing itself from the prior art.

With regards to claim 2;

Applicant says that the Dijkstra algorithm does not use at least an anti-cycling technique.

Claim 2 rejection reads, the method of claim 1, wherein the best-neighbor approach is a modified the best-neighbor approach that uses at least an anti-cycling technique. (Frigioni: Page 6, 1st Paragraph; the Dijkstra algorithm is inherently anti-cycling)

This illustrates that the Dijkstra algorithm is indeed a modified best neighbor approach. Applicant argues Dijkstra algorithm does not embody a descent approach at all and is therefore not subject to cycling. Dijkstra does traverse the vertices shortest distance first and maintains a set of vertices that have already been maintained. Because they are maintained, they are not cycled through. Again applicant mentions a descent approach that is cited from the specification. Applicant is again encouraged to enter the definitions from the specification into the claim language. Furthermore adding formulas to clarify and distinguish the instant application from the prior art.

With regards to claim 3;

Applicant argues that Dijkstra is not a best neighbor approach. The examiner maintains that the Dijkstra algorithm is a best-neighbor approach. Perhaps applicant is inaccurately defining the Dijkstra algorithm but if applicant argues this fact, he must support it with details.

With regards to claim 9,

Applicant argue Morrison does not teach a piece-wise linear cost function.

Applicant then defines the piece-wise cost function. It is clear applicants definition is different from the examiners interpreted definition. If applicant would include the definition in the claim language it would reduce any ambiguity.

Claim 9 reads, the method of claim 6, wherein generating a set of control weights is further based on a piece-wise linear equation (Morrison: col. 15, lines 1-5, col. 12, lines 1-10; col. 9, 16-25). Morrison clearly shows that equation 3.10 gives the system of linear equations satisfied by the implied costs.

With regards to claim 4 and 5, applicant believes the Kume reference is completely different art and has nothing in relation to 'diversification in the context of finding a minimum cost solution in the context of a multi-dimensional cost function and the process of randomly jumping from one region of the cost function to another <sup>2</sup> region of the cost function'.

The examiner believes it would be helpful to put the equation in the limitation. Claim 4 only reads... "where generating the set of weights is further based on a diversification process. So arguing the context of the reference is likened to arguing limitations that are not present in the claim. The Morrison reference teaches generating the weights and the Kume reference teaches the diversification process.

With regards to claim 13,


The examiner maintains that Morrison teaches the weighting device because it uses the weights to detect and process the flow of traffic (Morrison: col. 6, lines 42-44; col. 7, lines 30-44; col. 11, line 47- col. 12, line 10).

With regards to claim 21,

Applicant argues the term network links is not present in the Sue reference.

The examiner respectfully submits the term "network links" is no where in claim 21 either. It is also amended requiring further search.

Continuation of 11. does NOT place the application in condition for allowance because: Arguments to claims 1-19 are considered but are not persuasive, see remarks and further explanations above.

  
ARI D. ETIENNE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGICAL CENTER